GEOL 1303: Physical Geology
3 credits
Fall 2021

Section 10: MWF 9:00 - 9:50 am VIN 139

Instructor: Mr. Stephen Shields
Office: VIN 135
Phone: 325-486-6934 (office)
Email: stephen.shields@angelo.edu

Office Hours: Monday/Wednesday 3 – 4pm; Tuesday 9 – 10:30am and 2 – 4pm; and Thursday 9 – 10:30am, and by appointment

Required Materials:
- SmartWork6 for Earth Portrait of a Planet, SmartWork information
- ASU email account that you check regularly and the course page in Blackboard.

Student Learning Outcomes:
This course is designed to familiarize the student with the processes, principles, and theories involved in Physical Geology. The student will also learn and practice how to study and work together and how to carefully defend their thinking when answering questions or participating in a discussion. Learning outcomes will be evaluated by homework, assignments, quizzes, and exams. At the end of this course, the student will be able to:

1. Describe the scientific method and apply it in a geological context.
2. Describe Earth’s major systems and explain how they interact.
3. Identify common rocks and minerals and interpret how they form.
4. Describe and interpret the development of landforms and geologic structures.
5. Construct and interpret geologic and topographic maps, cross-sections, and topographic profiles.
6. Explain the plate tectonic theory and explain its relationship to earth processes, features, and landforms.

CELL PHONES AND OTHER ELECTRONIC DEVICES:
You may use a laptop or tablet to take notes during class. Please do not disturb others with their use. Please keep all electronics on vibrate or silent. The use of any electronic device not authorized by the instructor during a test may result in the forfeiture of your grade for that test. All electronic devices should be turned off and stored out of sight during tests.
GRADING:

- 5 HW Assignments (5% each) 25%
- 10 in-class activities/assignments (3% each) 30%
- 4 Lecture Exams (5% each) 20%
- 1 Final Comprehensive Exam 10%
- Weekly Quizzes 15%
  - Based on previous lecture topic and/or assigned reading. Quizzes will be available in Blackboard on Monday every week. The lowest three scores will be dropped.
  - Homework is through Smartwork, which is a required purchase for the class
  - In-class activities/assignments will be made available to those who miss due to an illness or other necessary absences.
  - Exams will be in person.
  - Extra Credit Project(s) (+0-5 pts): Brief, illustrated report about a scientific paper on a geology topic of your own choosing. Details to be provided after Exam 1.

There will be no make-ups for homework, in-class activities, or quizzes. Make-up exams will be given for tests ONLY under extenuating circumstances. Prior email notification is needed for a make-up exam.

ATTENDANCE POLICY:
You are expected to attend all scheduled class meetings. Attendance will be checked at each class meeting. Please inform me well ahead of time if you will need to be absent for any reason including religious holidays. NOTE: You are NOT automatically dropped if you stop attending class. November 22 is the last day to drop a course.

LECTURE:
A typical class meeting will combine mini-lectures, discussions, group activities, multimedia presentations, and other demonstrations and activities to give you an opportunity to learn concepts in as active a manner as possible.

CORE CURRICULUM STUDENT LEARNING OUTCOMES:
The following list of core curriculum student learning outcomes will be met and measured during this course:

<table>
<thead>
<tr>
<th>Student Learning Outcome</th>
<th>Assessment Method</th>
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<tbody>
<tr>
<td>1. Gather, analyze, evaluate, and synthesize information relevant to a question or issue</td>
<td>In-class activities</td>
</tr>
<tr>
<td>2. Develop, interpret, and express ideas through effective visual communication.</td>
<td>In-class activities</td>
</tr>
<tr>
<td>3. Manipulate and analyze numerical data and arrive at an informed conclusion</td>
<td>Homework/In-class Assignment</td>
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<tr>
<td>4. Manipulate and analyze observable facts and arrive at an informed conclusion</td>
<td>Quizzes and Exams</td>
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SMARTWORK ASSIGNMENTS
To complete the homework you will need to register with Smartwork using the registration code you got when you purchased the book or if you purchased the code separately. If you didn’t get a code when you purchased the book you can purchase one during the registration process. Use the following instructions to create an account with Smartwork:

To enroll in SmartWork you will need a valid ASU email address and a Registration Code from W. W. Norton. Registration codes are bundled with new books at your instructor's request. If you do not have a registration code, you may purchase one when signing up.

Register For Smartwork

1. Click on the link for any of the homeworks from the link in the menu in Blackboard.
2. Select “No, I need to register, purchase, or sign up for trial access.” Click the green button to continue.
3. Fill out all fields and enter either the registration code that came with your book or select the “I want to purchase access” option. NOTE: Use your ASU email as the email address for your Smartwork account. Don't forget to record your account information for future reference!

Access your homeworks through the links in the appropriate area on Blackboard.

For each homework assignment you will complete a list of questions. You can submit answers to the questions up to 4 times, however, each additional submission after the first will cost you a 5% deduction on your grade. So don’t just go guess until you get it right, it will cost you.

CLASS PREPARATION ASU EMAIL:
Since class announcements will be routinely distributed via email and Blackboard, you will need to regularly check your ASU email account and our course Blackboard site (daily). All course correspondence will be through your ASU email account and Blackboard. Please see the email policy in Bb for more details. ASU provides Internet and email services to you at any of the computer labs on campus. Call 942-2911 to set this up if necessary.

General Policies Related to This Course
All students are required to follow the policies and procedures presented in these documents:

- Angelo State University Student Handbook
- Angelo State University Catalog
Academic Integrity

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject to disciplinary action and possible expulsion from ASU.

The College of Science and Engineering adheres to the university’s Statement of Academic Integrity.

Accommodations for Students with Disabilities

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student’s responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at ADA@angelo.edu. For more information about the application process and requirements, visit the Student Disability Services website. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford
Director of Student Disability Services
Office of Student Affairs
325-942-2047
dallas.swafford@angelo.edu
Houston Harte University Center, Room 112

Incomplete Grade Policy

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 Grading Procedures for more information.
**Plagiarism**

Plagiarism is a serious topic covered in ASU’s Academic Integrity policy in the Student Handbook. Plagiarism is the action or practice of taking someone else’s work, idea, etc., and passing it off as one’s own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality. Resources to help you understand this policy better are available at the ASU Writing Center.

**Student Absence for Observance of Religious Holy Days**

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for Observance of Religious Holy Day for more information.

**Title IX at Angelo State University**

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents involving sexual misconduct to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: Incident Reporting Form

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: michelle.miller@angelo.edu
Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State’s policy please visit the Title IX website.

Information About COVID-19

Please refer to ASU’s COVID-19 (Coronavirus) Updates web page for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

Modifications to the Syllabus

This syllabus, including grade evaluation and course schedule, is subject to modification on potentially short notice based on developing circumstances.

COURSE EVALUATION:
Students are provided the opportunity and are strongly encouraged to participate in a course evaluation at the end of the semester.

GEOLOGIC EXHIBITION ORGANIZATION (GEO):
GEO, the student organization of all interested in geology (not just majors/minors), meets almost every Wednesday @ 6:00PM. GEO is a student chapter of the American Association of petroleum Geologists (AAPG). Sigma Gamma Epsilon, the national honor society of the earth sciences is related to GEO.

YOU CAN MAJOR OR MINOR IN GEOLOGY @ ASU!
See the BS in Geoscience requirements. A Geology Minor requires 18 hours of geology courses. Good and rewarding careers exist for geologists, geophysicists, hydrogeologists, secondary science teachers, and petroleum engineers. Talk to your professor and read information about geoscience careers.

FINAL NOTE:
It is my goal to make this class both interesting and informative for you. With a reasonable amount of effort, it should be possible for everyone to meet the course objectives and earn a passing grade. With additional effort, aptitude, and investment of time, students may earn even higher course grades. If at any time you run into difficulties with the material, or need assistance or clarification, please do not hesitate to ask for help. I am here for you, and I will be glad to entertain any reasonable requests.

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ii [https://blackboard.angelo.edu/](https://blackboard.angelo.edu/)
<table>
<thead>
<tr>
<th>Week</th>
<th>Lecture Topics</th>
<th>Assigned Reading</th>
<th>Exams and HW Due Dates</th>
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</thead>
</table>
| #1: 8/23 - 8/27 | Syllabus  
Scientific Method  
Solar System Formation | Prelude  
Chapter 1 |                                |
| #2: 8/30 - 9/3  | Planet Earth  
Minerals                                  | Chapter 2  
Chapter 5 |                                |
| #3: 9/8 - 9/10  | No class Monday  
Continental Drift  
Plate Tectonics                             | Chapter 3  
Chapter 4 | HW #1 due 9/12 @ 11:59pm          |
| #4: 9/13 - 9/17 | Igneous Rocks                                     | Chapter 6 |                                |
| #5: 9/20 - 9/24 | Sedimentary Rocks  
Metamorphic Rocks                              | Chapter 7  
Chapter 8 | Exam #1: Chapters 1-5 (F)         |
| #6: 9/27 - 10/1 | Weathering, Erosion  
& The Rock Cycle                                | Interludes B and C |                                |
| #7: 10/4 - 10/8  | Volcanoes  
Earthquakes                                | Chapter 9  
Chapter 10 | HW #2 due 10/3 @ 11:59pm  
Exam #2: Chapters 6-8 and  
Interludes B and C (W) |
| #8: 10/11 - 10/15 | Mountain Building  
Geologic Time                              | Chapter 11  
Chapter 12 | HW #3 due 10/17 @ 11:59pm        |
| #9: 10/18 - 10/22 | Geologic Time  
Energy Resources                          | Chapter 14 |                                |
| #10: 10/25 – 10/29 | Hydrologic Cycle  
Streams and Floods                   | Interlude F  
Chapter 17 | Exam #3: Chapters 9-12 (W)       |
| #11: 11/1 - 11/5  | Groundwater                                        | Chapter 19 | HW #4 due 11/7 @ 11:59pm       |
| #12: 11/8 - 11/12 | Deserts                                           | Chapter 21 |                                |
| #13: 11/15 - 11/19 | Glaciers                                         | Chapter 22 | Exam #4: Chapters 14, 17, 19 and  
Interlude F (W)                |
| #14: 11/22 - 11/26 | Climate Change  
No classes Nov. 24-26                   | Chapter 23 |                                |
| #15: 11/29 - 12/3  | Climate Change                                    | Cumulative | HW #5 due 12/5 @ 11:59pm       |
| #16: 12/6 - 12/10 | Final Exam                                         | Cumulative | Wed. 12/8, 8 – 10am            |